

REMARKS

Entry of the foregoing and reconsideration of the application identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.116 and in light of the remarks which follow, are respectfully requested.

By the above amendments, claim 25 has been amended to recite that R comprises 2 to 100 carbon atoms. Support for this amendment can be found in the instant specification at least at page 5, lines 19-20. Claim 28 has been amended in a manner consistent with the above amendment to claim 25. Entry of the above amendments is proper at least because such amendments are effective to place the application in condition for allowance or in better form for appeal. See M.P.E.P. §714.12.

In the Official Action, claims 25-48 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being obvious over claims 24-37 and 39-46 of copending Application No. 10/498,255 in view of U.S. Patent Application Publication No. 2002/0115771 (*Schueler et al*). Applicants respectfully request the Examiner to hold this rejection in abeyance until the present application is held to otherwise be in condition for allowance. Further, Applicants note that the deficiencies of *Schueler et al* are discussed below in connection with the §102(b) rejection based on such document.

Claims 25-34, 36-40 and 43-48 stand rejected under 35 U.S.C. §102(b) as being anticipated by *Schueler et al*. Withdrawal of this rejection is respectfully requested for at least the following reasons.

Independent claim 25 recites a thermoplastic composition comprising a mixture of a polyamide and/or polyester matrix with at least: (i) a first additive of

formula $R-Z_u$, in which: R is a hydrocarbon radical optionally comprising one or more heteroatoms, wherein R comprises 2 to 100 carbon atoms, u is an integer greater than or equal to 1, and Z is an acid, amine or alcohol functional group; and (ii) a second additive.

Schueler et al relates to a molding composition which comprises components I, II and III. See paragraphs [0008] to [0019]. *Schueler et al* discloses that component III is a copolymer which contains units of monomers a), b) and c). See paragraph [0011].

It is well established that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). For an anticipation to exist, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Schueler et al does not disclose each feature recited in independent claim 25, and as such fails to constitute an anticipation of such claim. For example, *Schueler et al* does not disclose a thermoplastic composition comprising a mixture of a polyamide and/or polyester matrix with at least (i) a first additive of formula $R-Z_u$, in which R is a hydrocarbon radical optionally comprising one or more heteroatoms, wherein R comprises 2 to 100 carbon atoms, u is an integer greater than or equal to 1, and Z is an acid, amine or alcohol functional group. *Schueler et al* has no disclosure or suggestion of the recited first additive of formula $R-Z_u$, wherein R comprises 2 to 100 carbon atoms.

At page 15 of the Official Action, the Patent Office has taken the position that "The entire copolymer of Component III reads on the first additive of the formula R-Z_u." Thus, the Patent Office has alleged that the component III copolymer of *Schueler et al* is the same as the recited first additive. Applicants respectfully but strenuously disagree with this assertion.

Schueler et al discloses that component III is a copolymer which contains the units of monomers a), b) and c). Quite clearly, such component III, **which is a copolymer**, is not the same as the recited first additive of formula R-Z_u, **wherein R comprises 2 to 100 carbon atoms**, as is presently claimed. There is simply no disclosure that the component III copolymer has a structure corresponding to the claimed formula R-Z_u, wherein R comprises 2 to 100 carbon atoms.

The Patent Office has also alleged that the melamine cyanurate disclosed at paragraph [0080] of *Schueler et al* corresponds to the recited first additive. See Official Action at page 5. As noted at page 5 of Applicants' disclosure, the first additive can, for example, partially or completely react with the polyamide and/or polyester matrix. By comparison, there is no indication by *Schueler et al* that the melamine cyanurate, which is employed as a flame retardant, is capable of partially or completely reacting with a polyamide and/or polyester matrix. As such, for at least this reason, it is clear that the melamine cyanurate disclosed by *Schueler et al* is not the same as the recited first additive.

For at least the above reasons, it is apparent that *Schueler et al* fails to constitute an anticipation of independent claim 25. Accordingly, withdrawal of the above rejection is respectfully requested.

Claim 41 stands rejected under 35 U.S.C. §103(a) as being obvious over *Schueler et al.* Claim 35 stands rejected under 35 U.S.C. §103(a) as being obvious over *Schueler et al* in view of U.S. Patent No. 3,558,567 (*Twilley et al*). Claim 42 stands rejected under 35 U.S.C. §103(a) as being obvious over *Schueler et al* in view of Polymer, Vol. 42, Issue 5, March 2001, pp. 1931-1939 (*Hsieh et al*). Withdrawal of these rejections is respectfully requested for at least the following reasons.

The deficiencies of the primary applied document, *Schueler et al*, are discussed above. *Schueler et al* fails to disclose or suggest a mixture of a polyamide and/or polyester matrix with at least a first additive of formula $R-Z_u$, in which R is a hydrocarbon radical optionally comprising one or more heteroatoms, wherein R comprises 2 to 100 carbon atoms, u is an integer greater than or equal to 1, and Z is an acid, amine or alcohol functional group, as recited in claim 25. As discussed above, the Component III copolymer and melamine cyanurate of *Schueler et al* does not correspond to the recited first additive.

The secondary applied documents (i.e., *Twilley et al* and *Hsieh et al*), fail to cure the above-described deficiencies of *Schueler et al*. In this regard, *Twilley et al* has been relied on for disclosing that benzylamine may be used as a chain terminator for polyamides. See Official Action at page 12. *Hsieh et al* has been relied on for disclosing the use of dendritic polymers in polymer blends as flow modifiers to reduce blend viscosity and processing aids. See Official Action at page 13. However, even if such secondary applied documents would have been combined with *Schueler et al* in the manner alleged by the Patent Office, the resulting combination fails to disclose or suggest a mixture of a polyamide and/or

polyester matrix with at least a first additive of formula $R-Z_u$, in which R is a hydrocarbon radical optionally comprising one or more heteroatoms, wherein R comprises 2 to 100 carbon atoms, u is an integer greater than or equal to 1, and Z is an acid, amine or alcohol functional group, as recited in claim 25.

Accordingly, for at least the above reasons, withdrawal of the §103(a) rejections based on *Schueler et al*, *Twilley et al* and *Hsieh et al* is respectfully requested.

It is apparent that independent claim 25 is neither anticipated by nor obvious over *Schueler et al* for at least the reasons discussed above. The dependent claims are allowable at least by virtue of their direct or indirect dependence from independent claim 25. Thus, a detailed discussion of the additional distinguishing features recited in the dependent claims is not set forth at this time.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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Date: July 24, 2009

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